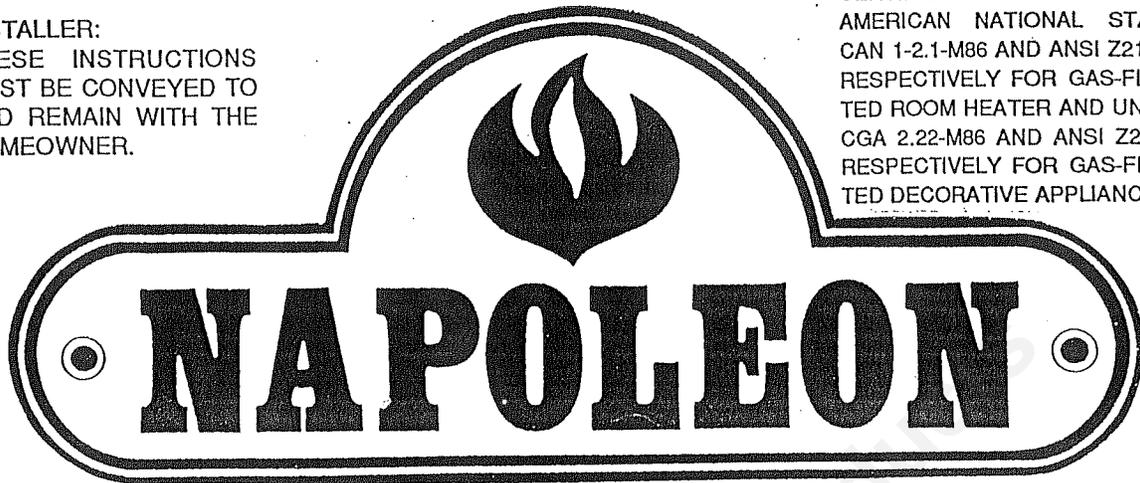


INSTALLER:  
THESE INSTRUCTIONS  
MUST BE CONVEYED TO  
AND REMAIN WITH THE  
HOMEOWNER.

CERTIFIED UNDER CANADIAN AND  
AMERICAN NATIONAL STANDARDS,  
CAN 1-2.1-M86 AND ANSI Z21.11.1-1991  
RESPECTIVELY FOR GAS-FIRED VEN-  
TED ROOM HEATER AND UNDER CAN/  
CGA 2.22-M86 AND ANSI Z21.50b-1990  
RESPECTIVELY FOR GAS-FIRED VEN-  
TED DECORATIVE APPLIANCE.



# FIREPLACES

GAS - STOVES

INSTALLATION AND OPERATION INSTRUCTIONS FOR  
GAS-FIRED VENTED ROOM HEATER AND  
GAS-FIRED VENTED DECORATIVE APPLIANCE

NATURAL GAS ROOM HEATER MODEL: **GS 3500-N**  
PROPANE GAS ROOM HEATER MODEL: **GS 3500-P**  
NATURAL GAS VENTED DECORATIVE APPLIANCE MODEL: **GSD 3500-N**  
PROPANE GAS VENTED DECORATIVE APPLIANCE MODEL: **GSD 3500-P**

**WARNING:** If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

#### FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPOURS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.

#### WHAT TO DO IF YOU SMELL GAS:

- TURN OFF MAIN GAS SUPPLY.
- OPEN WINDOWS
- DO NOT TRY TO LIGHT ANY APPLIANCE.
- DO NOT TOUCH ANY ELECTRICAL SWITCH; DO NOT USE ANY PHONE IN YOUR BUILDING.
- EXTINGUISH ANY OPEN FLAME.
- IMMEDIATELY CALL YOUR GAS SUPPLIER FROM A NEIGHBOUR'S PHONE. FOLLOW THE GAS SUPPLIER'S INSTRUCTIONS.
- IF YOU CANNOT REACH YOUR GAS SUPPLIER, CALL THE FIRE DEPARTMENT.

Warnock Hersey



member



CERTIFIED FOR CANADA AND UNITED STATES USING ANSI / AGA / CGA METHODS

MANUFACTURED BY: WOLF STEEL LTD., R.R.#1 BARRIE, ONTARIO, CANADA, L4M 4Y8 (705)721-1212, FAX (705)722-6031.

WS-415-55/04.23.93

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GSD-3500 / GS-3500

NAPOLEON

## 25 YEARS LIMITED WARRANTY

Wolf Steel Ltd. warrants its NAPOLEON GAS STOVE against manufacturing defects to the original purchaser only, subject to the following conditions:

1. Wolf Steel Ltd. will provide replacement parts free of charge during the first year of the Limited Warranty except logs, glass and plated finishes.  
All repair work, however, requires the prior approval of an authorized company official. Labour costs for account of Wolf Steel Ltd. shall not exceed the retail price of the replacement parts.
2. Wolf Steel Ltd. will provide replacement parts during the second through the fifth year of the Limited Warranty free of charge except electrical components, logs, glass, plated finishes, gas valve, pilot assembly, ignitor, and fan. Wolf Steel Ltd. will not be responsible for any labour costs in connection with those replacement parts.
3. Wolf Steel Ltd. will provide replacement parts (if available) at 50% of the retail price during the sixth through the twenty-fifth year of the Limited Warranty except the electrical components, logs, glass, plated finishes, gas valve, pilot assembly, ignitor, fan, and burner assembly. Wolf Steel Ltd. will not be responsible for any labour costs in connection with those replacement parts.

This Limited Warranty does not cover damages caused by misuse and is further conditional upon the correct installation and the intended use of our product.

The vent system is not included in the Limited Warranty but is separately covered by the vent manufacturer's Limited Warranty.

This Limited Warranty may not be extended whatsoever by any of our representatives.

**IMPORTANT: KEEP THE ORIGINAL INVOICE SINCE A PHOTOCOPY OF IT WILL BE REQUIRED IN CASE OF CLAIM.**

## PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

## 2. GENERAL INSTRUCTIONS

THIS GAS STOVE SHOULD BE INSTALLED AND SERVICED BY A QUALIFIED INSTALLER to conform with local codes. In the absence of local codes, install to the current CAN1-B149 Installation Code in Canada or to the National Fuel Gas Code, ANSI Z223.1-1988, and NFPA 54-1988 in the United States.

PURGE ALL GAS LINES WITH THE GLASS DOOR OF THE STOVE REMOVED. ASSURE THAT A CONTINUOUS GAS FLOW IS AT THE BURNER BEFORE INSTALLING THE DOOR.

UNDER EXTREME VENT CONFIGURATIONS, ALLOW SEVERAL MINUTES (5-15) FOR THE FLAME TO STABILIZE AFTER IGNITION.

The stove and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The stove must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

An 1/8 inch N.P.T. plug, accessible for test gauge connection, must be installed immediately upstream of the gas supply connection to the stove.

This stove must be connected to either a 4" "B" vent system or any accepted lined chimney system using a liner and vent connector listed to ULC-S635M(in Canada) or UL-1777(in USA). The venting connection must be in compliance

with the vent manufacturers installation instructions.

The stove, when installed with a blower, must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the ANSI/NFPA 70-1990 NATIONAL ELECTRICAL CODE in the United States. The blower power cord must be connected directly into a properly grounded receptacle. The grounding prong must not be removed from the cord plug.

Provide adequate ventilation and combustion air. Provide adequate accessibility clearance for servicing and operating the stove.

Never obstruct the front opening of the stove.

#### WARNING

- Do not burn wood or other materials in this stove.
- Adults and especially children should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition. Supervise young children when they are in the same room as the stove.
- Due to high temperatures, the stove should be located out of traffic and away from furniture and draperies.
- Clothing or other flammable material should not be placed on or near the stove.
- Any safety screen or guard removed for servicing must be replaced prior to operating the stove.
- It is imperative that the control compartments, burners and circulating blower and its passageway of the stove and venting system are kept clean. The stove and its venting system should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. The stove area must be kept clear and free from combustible materials, gasoline and other flammable vapours and liquids.
- Under no circumstances should this stove be modified.
- This stove must not be connected to a chimney flue pipe serving a separate solid fuel burning appliance.
- Do not use this stove if any part has been under water. Immediately call a qualified service technician to inspect the stove and to replace any part of the control system and any gas control which has been under water.
- Do not operate the stove with the glass door removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.
- Do not strike or slam shut the stove glass door.

### 3. GENERAL INFORMATION

FOR YOUR SATISFACTION, THIS STOVE HAS BEEN TEST-FIRED TO ASSURE ITS OPERATION AND QUALITY! Maximum input is 30,000 BTU/hr for natural gas and 24,000 BTU/hr for propane. Maximum output for natural gas is 22,500 BTU/hr at an efficiency of 75% with the fan on, 70% with the fan off, ; and 18,500 BTU/hr for propane at an efficiency of 77% with the fan on, 72% with the fan off. The efficiency rating of the fireplace is a product thermal efficiency rating, determined independently of any installed system under continuous conditions and applies to Canada only. For Model GSD3500, the efficiency rating was determined with the by-pass damper closed.

Where the stove has been factory equipped for hi-altitude using natural gas, the input has been downrated by 10%. Hi-altitude downrating for propane is not necessary.

Minimum inlet gas supply pressure is 4.5 inches water column for natural gas and 11.0 inches water column for propane. Maximum inlet gas pressure is 7.0 inches water column for natural gas and 13.0 inches water column for propane. Manifold pressure under flow conditions is 3.5 inches water column for natural gas and 10.0 inches water column for propane.

No external electricity (110 volts or 24 volts) is required for the gas system operation.

**GLASS** ~~THIS FIREPLACE~~ ~~ARE~~ ~~CERTIFIED~~ ~~FOR~~ ~~BEDROOM~~ ~~AND~~ ~~BED-SITTING~~ ~~ROOM~~ ~~INSTALLATION~~

The glass is 3/16" ceramic glass available from your Napoleon / Wolf Steel Ltd. dealer. DO NOT SUBSTITUTE MATERIALS. Clean the glass after the first 10 hours of operation with a non-abrasive, ammonia or vinegar-based glass cleaner. Thereafter clean as required. DO NOT CLEAN GLASS WHEN HOT!

#### BRASS & 24KARAT GOLD PLATED PARTS

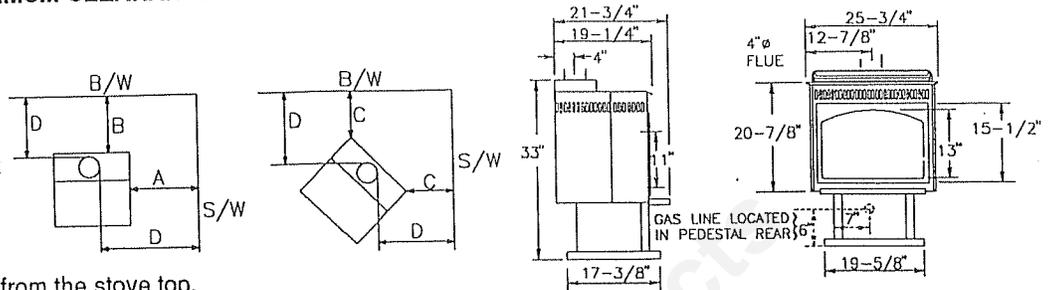
Your fireplace may be highlighted by brass or gold plating. Do not use abrasive cleaners to clean these parts. Buff lightly with a clean dry cloth.

### 4. LOCATION

The most desirable and beneficial location for a Napoleon Stove is in the centre of a building, thereby allowing the most efficient use of the heat created. The location of windows, doors and the traffic flow in the room where the stove is to be located should be considered. If possible, you should choose a location where the chimney will pass through the house without cutting a floor or roof joist.

**MAINTAIN THESE MINIMUM CLEARANCES TO COMBUSTIBLES:**

- A. 8"
- B. 5"
- C. 1"
- D. 1" "B" Vent or 6" single wall vent connector



minimum 18" to ceiling from the stove top.

**5. CHIMNEY INSTALLATION** Three types of chimney systems may be used with this stove:

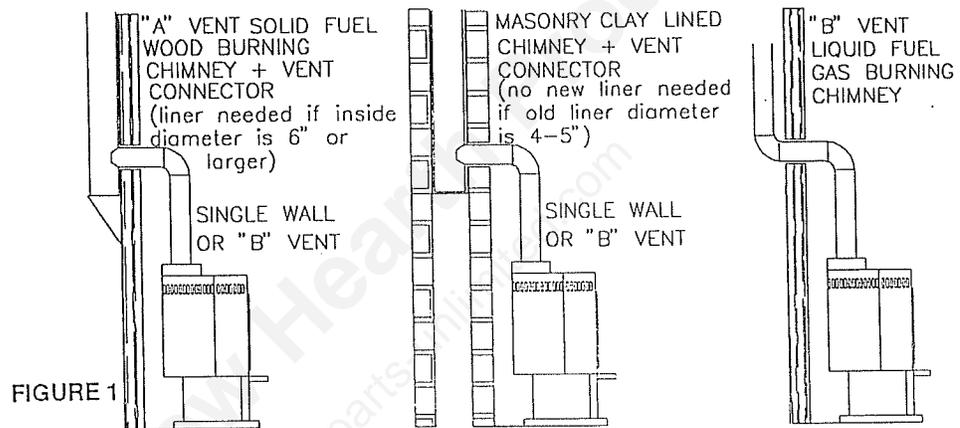


FIGURE 1

A CHIMNEY VENTING THIS STOVE SHALL NOT VENT ANY SOLID FUEL BURNING APPLIANCE. ALL HORIZONTAL RUNS MUST HAVE A 1/4 INCH RISE PER FOOT.

**INSTALLING "B" VENT:**

1. Move the stove into position. Try to center the exhaust of the stove, midway between two joists to prevent having to cut them. Use a plumb bob to line up the center.
2. Cut and frame an opening in the roof to provide a 1" clearance between the outside of the "B" vent and any combustible material. DO NOT FILL THIS SPACE WITH ANY TYPE OF MATERIAL. Nail headers between the joist for extra support. Fire-stop spacers must be placed on the bottom of each framed opening in any floor or ceiling that the "B" vent passes through. FIGURE 2
3. Hold a plumb bob from the underside of the roof to determine where the opening in the roof should be. Cut and frame the roof opening to maintain proper 1" clearances. FIGURE 3

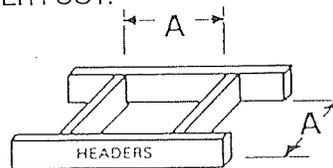
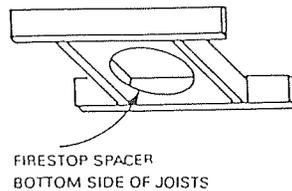


FIGURE 2



FIRESTOP SPACER  
BOTTOM SIDE OF JOISTS

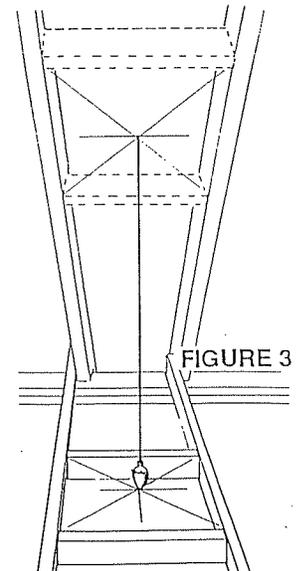


FIGURE 3

For aesthetics, a 6" telescoping stove pipe may be installed over the 4" vent connection or "B" vent. Either use a Napoleon stove pipe adapter available from your Napoleon dealer or cut approximately 2" from the crimped end of the 6" diameter chimney section to be inserted into the 6-1/4" canopy opening.

**ADDING VENT SECTIONS:**

Add vent sections, twist locking (clockwise) securely, to the required height. The vent must extend, at least 3 feet above its point of contact with the roof and at least 2 feet higher than any wall, roof or building within 10 feet. FIGURE 4.

### 6. INSTALLING FLASHING AND STORM COLLAR

Remove nails from the shingles above and to the sides of the chimney. Place the flashing over the vent pipe and, slide it underneath the sides and upper edge of the shingles. Ensure that the vent pipe is properly centered within the flashing, giving a 3/4" margin all around. Fasten to the roof on the top and sides. **DO NOT NAIL** through the lower portion of the flashing. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.

Apply waterproof caulking around the vent, 1" above the top of the flashing and push the storm collar down into the caulking. FIGURE 5. Attach a rain cap to the top of the last vent section.

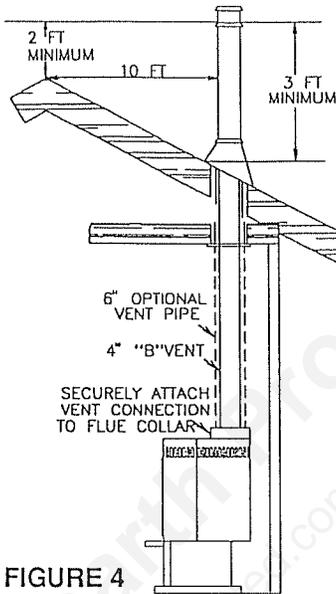


FIGURE 4

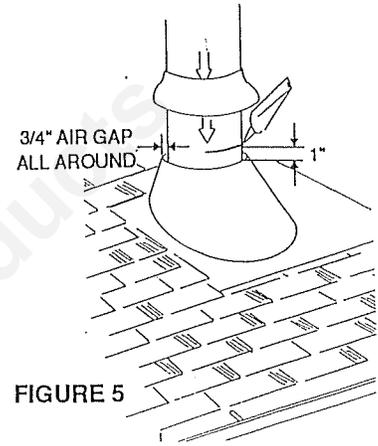


FIGURE 5

### 7. COMBUSTION AIR

ANY STOVE NEEDS AIR FOR SAFE OPERATION AND MUST BE INSTALLED IN SUCH A WAY THAT ADEQUATE COMBUSTION AIR IS AVAILABLE. THIS UNIT IS DESIGNED TO FUNCTION USING EITHER OUTSIDE OR INSIDE (ROOM) AIR.

If using outside air, connections can be made either through a hole in the wall to line up with the hole in the pedestal back or through a hole in the floor to line up with the hole in the pedestal base. Use a fresh air kit available through your Napoleon Fireplace dealer or Wolf Steel Ltd. Secure the 4 inch diameter aluminum liner by flaring the end once it is inserted through the 4-1/2 inch diameter hole in either the back or base of the pedestal. If the air intake is through the floor, the hole in the pedestal back should be covered. Avoid cutting away floor joists, electrical wiring or plumbing. Seal around the outside pipe with insulation to prevent drafts. FIGURE 6.

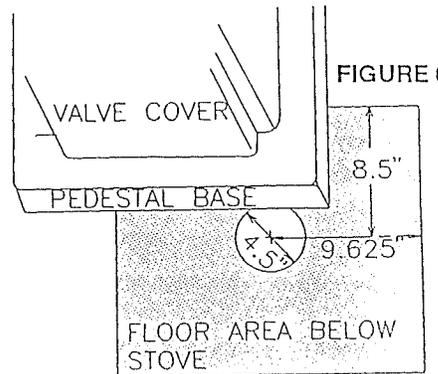


FIGURE 6

### 8. GAS INSTALLATION

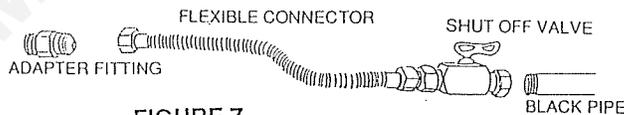


FIGURE 7

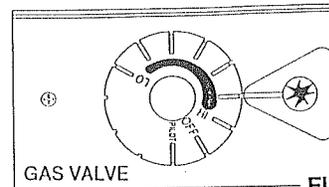


FIGURE 8

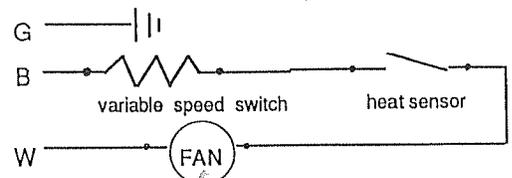
Bring the gas line to the stove through either a hole in the pedestal back or in the floor area directly beneath the pedestal base. Install rigid black pipe, a flex connector, if local codes permit, or 1/2" type L copper tubing with a 3/8" to 1/2" adapter and a shut off valve to the stove. FIGURE 7. Seal and tighten securely. The adapter will be required between the gas valve and the copper tubing or flex connector. **DO NOT KINK FLEX CONNECTOR.** Check for gas leaks by brushing on a soap and water solution. **DO NOT USE OPEN FLAME.**

**DO NOT CONNECT THE GAS VALVE TO ELECTRICITY (110 VOLTS OR 24 VOLTS) FIGURE 8.**

### 9. OPTIONAL BLOWER SYSTEM

Provision has been made on the Napoleon gas stove to install an optional blower on the rear wall. Because the blower is thermally activated, when turned on, it will automatically start after approximately 30 minutes from a cold start (pilot off) or 15 minutes from a warm start (pilot on) and will run for approximately 30 minutes after the stove has been turned off.

Use of the fan increases the output of heat. Complete installation instructions are included with the blower assembly.



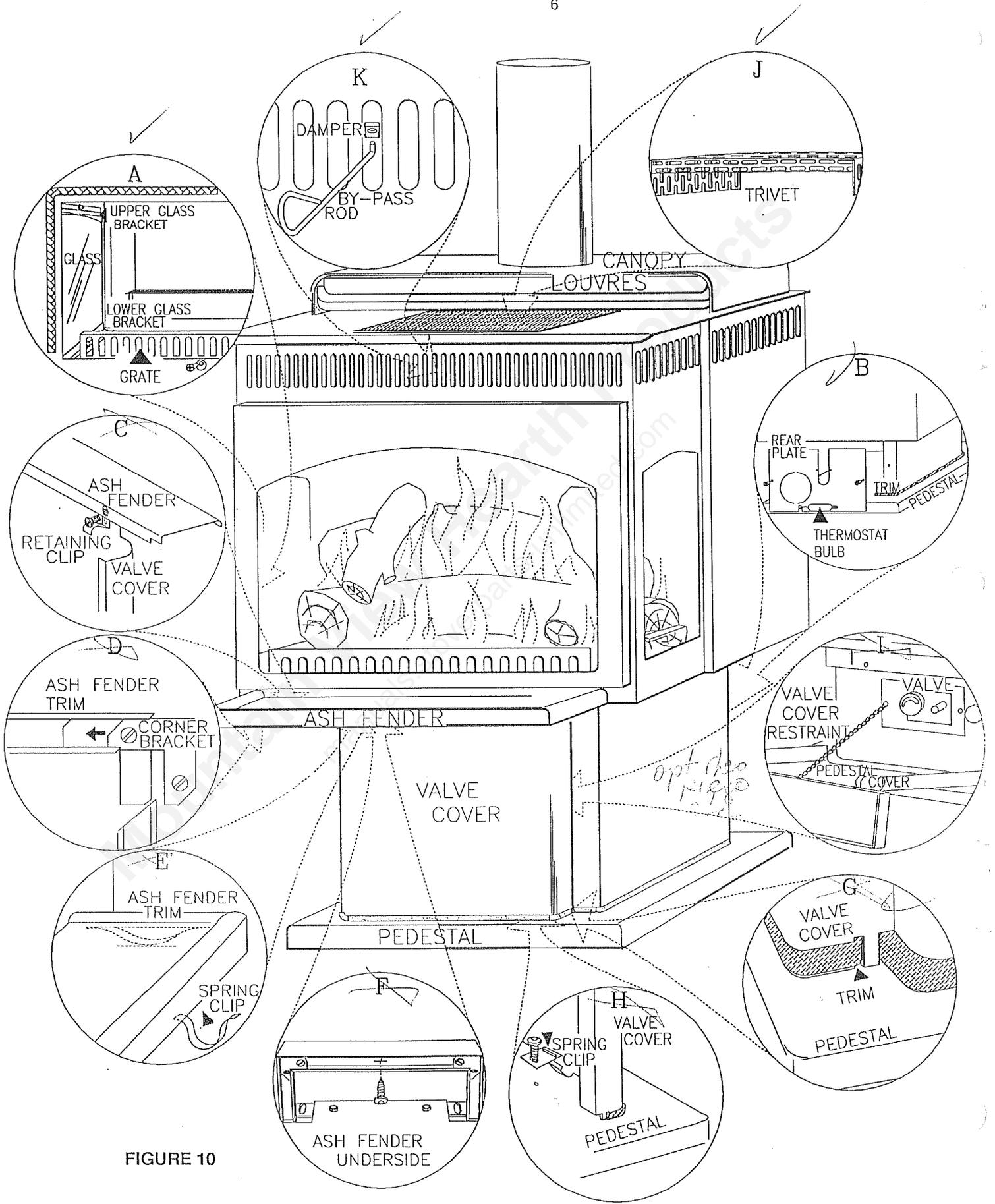


FIGURE 10

## 10. FINISHING YOUR STOVE (FIGURE 10)

**SIDE WINDOWS:** To install the side windows, remove the upper and lower glass brackets. Position the glass and replace the brackets. FIGURE 10(A).

**GRATE:** Secure grate centrally to burner using a #8x1/2" screw. The hole located below the middle of the door opening provides access for your screw driver or socket wrench. FIGURE 10(A).

**PEDESTAL TRIM:** Remove the rear plate, making sure not to damage the thermostat bulb or to crimp the tubing. Ensure that the pedestal surfaces are clean and dry; peel the protective backing from the trim adhesive and pressing firmly, attach the brass trim to the pedestal where the three sides and the base meet. Start at one end and proceed around the pedestal. Cut trim to size and retain remainder for use on the valve cover. Attach the rear plate as shown trapping the trim between the plate and the pedestal. FIGURE 10(B).

**ASH FENDER:** Door must be installed before ash fender/valve cover assembly can be made functional. Screw the ash fender and retaining clip as shown to the valve cover using 2 #8 screws and nuts. FIGURE 10(C).

**ASH FENDER TRIM:** The three pieces of trim are assembled in the same manner as a picture frame. Place the corner brackets (with screw loosened) into the trim sections. FIGURE 10(D). Tighten the screw spreading the two pieces apart. Attach the adjoining section. Repeat with the opposite side. Tighten all screws firmly. Slide onto the outside edge of the ash fender. Insert a spring clip centered into the underside portion of each piece of trim. FIGURE 10(E). Run a self-drilling #6 x 3/8" screw, centered, into the groove located in the underside of the front trim, just behind the front lip of the ash fender. This will prevent the trim being pulled off while opening or closing the valve cover. FIGURE 10(F).

**VALVE COVER TRIM:** Make sure of a clean and dry surface and as before, peel off the backing from the trim adhesive. Insert one end of the brass trim into one of the slots located in the valve cover and pressing firmly, proceed around to the other slot. Cut trim to size. FIGURE 10(G).

**VALVE COVER:** Attach a spring clip to each of the two tabs located on the lower inside edge of the valve cover. Tilting the valve cover slightly towards you, locate the spring clip hole over the corresponding hole in the pedestal base and secure using the two #8 screws. FIGURE 10(H).

**VALVE COVER RESTRAINT:** Attach one end of the restraint to the valve cover plate using the screw to the left of the valve. The other end is fastened to the center hole at the top of the pedestal cover using a machine screw and nut. FIGURE 10(I). *ADJUST RETAINING CLIPS (FIG. 10 I) IN ORDER TO PROPERLY SECURE VALVE COVER IN CLOSED POSITION.*

**ORNAMENTAL TRIVET:** Insert trivet into the space on the stove top. FIGURE 10(J).

## 11. SPILL SWITCH - GS3500 ONLY

This is a thermally activated switch, attached to the back of the dilution draft hood, which senses the change in temperature and shuts down the gas valve in the event of a severe downdraft of air or a blocked or disconnected vent. It acts as a safety shut-off to prevent a build up of carbon monoxide or an explosion of unburnt gases during start up. If the flue is blocked or has no "draw", the spill switch will automatically shut off the supply of gas within about 5-10 minutes. **TAMPERING WITH THE SWITCH CAN RESULT IN CARBON MONOXIDE (CO) POISONING AND POSSIBLE DEATH.**

**PURGE ALL GAS LINES WITH THE GLASS DOOR OF THE STOVE REMOVED. ASSURE THAT A CONTINUOUS GAS FLOW IS AT THE BURNER BEFORE INSTALLING THE DOOR.**

**ALLOW SEVERAL (5-15) MINUTES FOR THE FLAME TO STABILIZE AFTER IGNITION.**

### 11a. VENTING ACTION CHECK

A CHECK FOR CORRECT VENTING ACTION MUST BE MADE BEFORE THE INSTALLED STOVE IS LEFT WITH THE CUSTOMER. TEST IN THE FOLLOWING MANNER:

1. Close all doors and windows in the room / start exhaust fans in the home / turn fireplace blower off (where applicable).
2. Set controls to "high" and light the unit.
3. Wait 5 minutes. Hold a lit match along the edge of the dilution hood visible through the rear wall opening and extend it 1" into the dilution hood.
4. Venting action is satisfactory if smoke is drawn into the draft dilution hood and the flame rises vertically and slightly to the right. Venting action is unsatisfactory if smoke spills back, the flame splays horizontally and back toward you.
5. If venting action is unsatisfactory, turn off the unit, wait 10 minutes and try again. If the smoke or flame is still not drawn into the draft dilution hood, turn the unit off and check for vent blockage or restriction. If necessary, consult with a qualified inspector.

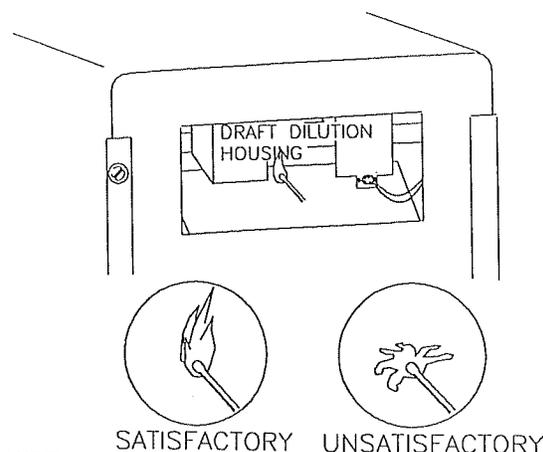


FIGURE 11

## 12. SUMMER BY-PASS DAMPER

### MODEL GSD-3500 ONLY :

The summer by-pass damper has been designed for those days in spring, summer or early fall, when you wish to enjoy the atmosphere of a fire without producing excessive heat. Using the by-pass rod (supplied), reach through the upper decorative slots and hooking onto the damper, pull towards you to by-pass the heat exchanger FIGURE 10(K). For maximum heat output, close damper fully.

## 13. GLOWING EMBERS / LOG PLACEMENT INSTRUCTIONS

YOU MAY FIND IT EASIER TO PLACE THE "GLOWING EMBERS" PRIOR TO POSITIONING THE LOGS.

"GLOWING EMBERS": Tear the "glowing embers" into pieces and place beneath and under the sides of the front log. Care should be taken to shred the embers into thin, small irregular pieces as only the exposed edges of the fibre hairs will glow. Maintain a clearance of 1/8" (3 mm) between the "glowing ember" material and the burner ports. FIGURE 13. Blocked burner ports can cause an incorrect flame pattern, carbon deposits and delayed ignition.

THE EMBER MATERIAL WILL ONLY GLOW WHEN EXPOSED TO DIRECT FLAME; HOWEVER CARE SHOULD BE TAKEN NOT TO BLOCK THE BURNER PORTS.

Use only certified "glowing embers" available from your Napoleon/Wolf Steel Ltd. dealer.

POSITIONING THE LOGS:

1. Place the large curved front log onto the main burner, pushing it against the burner tower. The left and right spacing between the log ends and the burner ports should be equal.
2. Place the large straight back log onto the log support located on the rear wall of the combustion chamber, pushing it as close to the wall as possible. FIGURE 12. A space of 1/4" should be maintained between the log and the thermocouple.
3. While supporting the back log, to prevent it from rolling forward, set the right and left smaller logs into the pockets and grooves of the front and back logs, respectively.

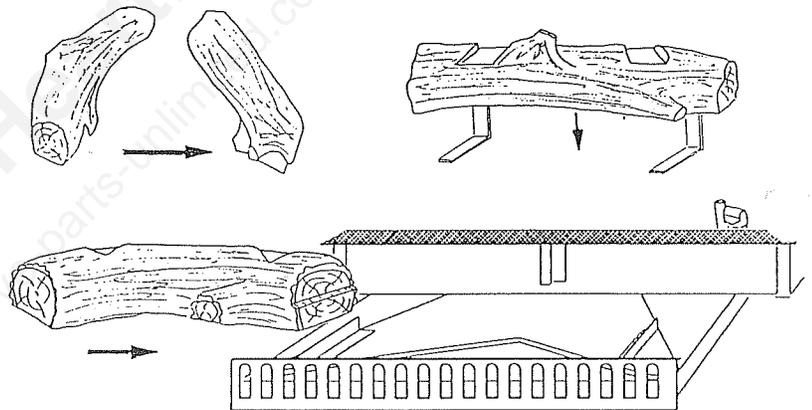


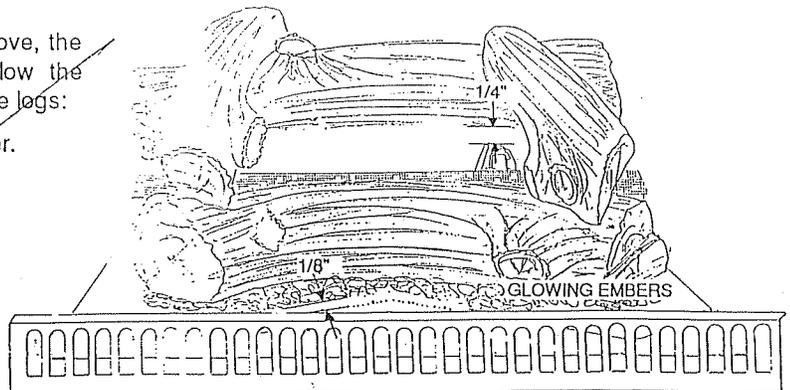
FIGURE 12

POSITIONING THE LOGS IMPROPERLY WILL CAUSE FLAME IMPINGEMENT AND CARBONING. THE APPEARANCE OF HAIRLINE CRACKS IN THE LOGS IS NORMAL AND DOES NOT AFFECT THE SAFETY OF THE OPERATION.

## 14. LOG CURING

**WARNING:** Before you start operating your stove, the ceramic logs need to be cured. Please follow the instructions carefully to avoid large cracks in the logs:

1. Make sure the logs sit properly on the burner.
2. Fire the stove for 5 minutes only, turn the main burner and pilot light off.
3. Wait a minimum of one hour to let the logs cure.
4. Fire the stove for 10 minutes, then turn the main burner and pilot light off.
5. Wait a minimum of 2 hours to let the logs cure again.
6. Fire the stove for 30 minutes then turn the main burner and pilot light off again.
7. Wait for a minimum of six hours to let the logs cure.



Now your logs are fully cured and ready for normal use. Hairline cracks could still develop but are a normal condition and do not affect the safety of the log set.

The logs can be painted in any colour, lighter or darker, using high temperature paint. Dark painted logs may be highlighted with high temperature gold or silver paint to create an attractive glow effect.

## 15. GAS VALVE OPERATION

The fireplace gas valve is controlled and modulated using a thermostat bulb located on the knockout plate at the rear of the pedestal. FIGURE 10(1). On cold start-ups, the main burner will come on at maximum input rate. As the room temperature rises and nears the point that is set on the gas knob, the input (flames) will modulate (reduce gradually) to the minimum input rate. Gas input remains at this level until the set point is reached; at this time the main burner will completely shut off. When the room temperature drops a few degrees, the main burner will re-ignite at a reduced input rate. For full view of the fireplace flames, set the gas knob to "HI".

## 16. OPERATING INSTRUCTIONS

When lit for the first time after the log curing stage, the stove will emit a slight odour for a few hours. This is a normal temporary condition caused by the curing of the logs and the "burn-in" of internal paints and lubricants used in the manufacturing process and will not occur again. Simply open a window to sufficiently ventilate the room.

- A This appliance has a pilot which must be lit by hand while following these instructions exactly.
- B Before lighting, smell all around the fireplace area for gas and next to the floor because some gas is heavier than air and will settle on the floor.
- C Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D Do not use this stove if any part has been under water. Immediately call a qualified service technician to inspect the unit and replace any part of the control system and any gas control touched by water.

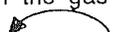
### WHAT TO DO IF YOU SMELL GAS:

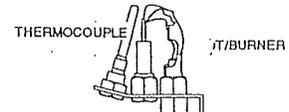
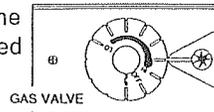
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

### LIGHTING INSTRUCTIONS:

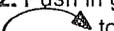
**WARNING:** The gas valve has an interlock device which will not allow the pilot burner to be lit until the thermocouple has cooled. Allow approximately 60 seconds for thermocouple to cool.

1. **STOP!** Read the safety information above.
2. Turn off all electrical power to the fireplace.
3. Turn the gas knob clockwise to off. 
4. Wait 5 minutes for any gas in the combustion chamber to escape. Continue to the next step if you do NOT smell any gas. If you smell gas, **STOP!** and follow the instructions in "What To Do If You Smell Gas" listed above.

5. Locate the pilot situated in front of the rear log.
6. Turn the gas knob counter-clockwise to "pilot" position. 
7. Depress and hold the gas knob while lighting the pilot with the push button ignitor. Keep the knob fully depressed for one (1) minute, then release. If the pilot does not continue to burn, repeat steps 3 through 6.
8. With the pilot lit, turn the gas knob counter-clockwise to desired temperature setting. 
9. Turn on all electrical power to the stove.



### INSTRUCTIONS TO TURN OFF GAS:

1. Turn off all electrical power to the unit if service is to be performed.
2. Push in gas control knob slightly and turn clockwise to off. Do not force. 

## 17. PILOT BURNER ADJUSTMENT FIGURE 14

1. Remove the plastic valve cover.
2. Adjust the pilot screw to provide properly sized flame.
3. Replace the valve cover.

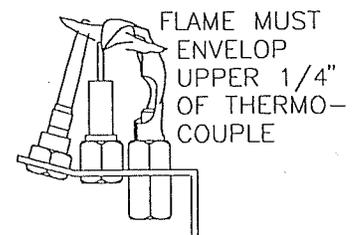
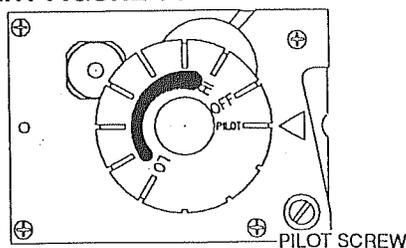
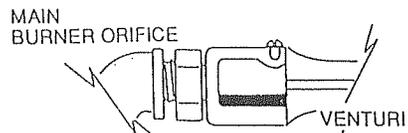


FIGURE 14

**18. VENTURI ADJUSTMENT**

Natural gas models have air shutters set at 5/32 (.156) inch open. Propane gas models have air shutters set at 3/16 (0.188) inch open. Closing the air shutter will cause a more yellow flame, but can lead to carboning. Opening the air shutter will cause a more blue flame, but can cause flame lifting from the burner ports. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame colour to be established. FIGURE 15.



**FIGURE 15**

**AIR SHUTTER ADJUSTMENT MUST ONLY BE DONE BY A QUALIFIED GAS INSTALLER!**

**19. MAINTENANCE**

**TURN OFF THE GAS AND UNPLUG ANY ELECTRICAL POWER BEFORE SERVICING THE FIREPLACE.**

This fireplace and the venting system should be inspected before use and at least annually by a qualified service person.

The flow of combustion and ventilation air must not be obstructed.

The fireplace area must be kept clear and free of combustible materials, gasoline or other flammable vapours and liquids.

1. In order to properly clean the burner and pilot assembly, remove the logs to expose both assemblies.
2. Keep the control compartment, logs, burner and the area surrounding the logs clean by vacuuming or brushing, at least once a year.
3. Check to see that all burner ports are burning. Clean out any of the ports which may not be burning or are not burning properly. FIGURE 10.
4. Check to see that the pilot flame is large enough to engulf the thermocouple on one leg and reaches toward the burner on the other leg.
5. Replace cleaned logs.
6. Check to see that the main burner ignites completely on all openings when the gas knob for the burner is turned on. A 5-10 second total light-up period is satisfactory. If ignition takes longer, consult your Napoleon dealer/distributor.

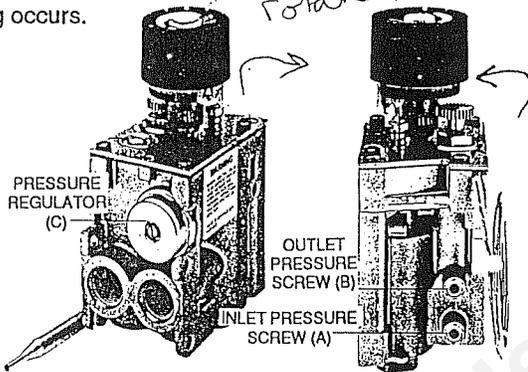
**20. TROUBLE SHOOTING GUIDE**

**NOTE:** Before attempting to trouble shoot, purge your unit and initially light the pilot and the main burner with the glass door of the fireplace removed.

<u>SYMPTOM</u>	<u>PROBLEM</u>	<u>TEST SOLUTION</u>
Pilot will not light.  	A - No spark at the pilot burner	<ul style="list-style-type: none"> <li>- check that the wire is connected to the push button ignitor.</li> <li>- check if the push button ignitor needs tightening.</li> <li>- replace the wire if the wire insulation is frayed or broken.</li> <li>- replace the electrode if the ceramic insulator is cracked or broken.</li> <li>- replace the push button ignitor.</li> </ul>
	B - spark gap is incorrect	<ul style="list-style-type: none"> <li>- spark gap should be .07" to .08" from the electrode tip and the pilot burner. Light the pilot with a match and adjust the electrode tip to the required spark gap and proper location</li> </ul>
	C - No gas at the pilot burner	<ul style="list-style-type: none"> <li>- check that the manual valve is turned on.</li> <li>- check the pilot orifice for blockage.</li> <li>- replace the valve.</li> <li>- call the gas distributor.</li> </ul>
	D - Out of propane gas	<ul style="list-style-type: none"> <li>- fill the tank</li> </ul>
Pilot burning; no gas to main burner; gas knob is on "HI";	A - Main burner orifice is plugged.	<ul style="list-style-type: none"> <li>- remove stoppage in orifice.</li> </ul>
	B - Faulty valve	<ul style="list-style-type: none"> <li>- replace</li> </ul>

<b>SYMPTOM</b>	<b>PROBLEM</b>	<b>TEST SOLUTION</b>
Pilot goes out when the gas knob is released.	<p>A - System is not correctly purged</p> <p>B - Out of propane gas</p> <p>C - Pilot flame is not large enough</p> <p>D - Pilot flame is not engulfing the thermocouple</p> <p>E - Thermocouple shorting</p> <p>F - Faulty thermocouple/spill switch</p> <p>G - Faulty valve</p>	<ul style="list-style-type: none"> <li>- purge the gas line.</li> <li>- fill the tank</li> <li>- turn up the pilot flame.</li> <li>- gently twist the pilot head to improve the flame pattern around the thermocouple.</li> <li>- loosen and tighten the thermocouple connection to valve.</li> <li>- replace thermocouple.</li> <li>- replace valve.</li> <li>- replace</li> <li>- replace valve.</li> </ul>
Main burner goes out: pilot goes out.	<p>A - Refer to the above symptom, "Main burner goes out; pilot stays on".</p> <p>B - Chimney down-drafting</p> <p>C - Chimney blocked.</p> <p>D - "B"vent disconnected from stove.</p> <p>E - Faulty spill switch.</p>	<p>"Main burner goes out; pilot stays on".</p> <ul style="list-style-type: none"> <li>- wait ten minutes.</li> <li>Shut-off all exhaust fans in the house (ie: kitchen and bathrooms), furnace and clothes dryer. Open windows and/or door. Start fireplace and monitor its operation. Close doors and windows and start appliances as before; room is in negative pressure, increase fresh air supply.</li> <li>- check for chimney blockage.</li> <li>- re-attach to stove.</li> <li>- replace spill switch.</li> </ul>
Main burner flame is a blue, lazy, transparent flame	<p>A - insufficient secondary air</p> <p>B - downdraft or blockage in chimney</p>	<ul style="list-style-type: none"> <li>- increase fresh air supply (open door, window, add make-up air supply)</li> <li>- remove blockage</li> <li>- check that chimney is installed to building code (3ft above roof line or 2ft higher than ridge within a 10ft radius of chimney)</li> </ul>
Main burner goes out; pilot stays on.	<p>A - Pilot flame is not large enough or not engulfing the thermocouple</p> <p>B - Thermocouple shorting</p>	<ul style="list-style-type: none"> <li>- turn up the pilot flame. Gently twist the pilot head to improve the flame pattern around the thermocouple.</li> <li>- clean thermocouple connection to valve.</li> </ul>
Exhaust fumes smelled in room, headaches.	A - fireplace is spilling	<ul style="list-style-type: none"> <li>- check that spill switch is still operational.</li> <li>- check for chimney blockage.</li> <li>- check that chimney is installed to building code.</li> <li>- room is in negative pressure, increase fresh air supply.</li> </ul>
Carbon is being deposited on glass, logs or combustion chamber surfaces.	A - flame is impinging on the logs or combustion chamber	<ul style="list-style-type: none"> <li>- check that the logs are correctly positioned.</li> <li>- open air shutter to increase the primary air.</li> <li>- check the input rate: check the manifold pressure and orifice size as specified by the rating plate values.</li> </ul>

<u>SYMPTOM</u>	<u>PROBLEM</u>	<u>TEST SOLUTION</u>
White/grey film forms.	Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces.	Clean glass with a non-abrasive ammonia or vinegar based glass cleaner. <b>DO NOT CLEAN GLASS WHEN HOT.</b> If deposits are not cleaned off regularly, <del>crazing will occur and film on glass will become permanently</del> <sup>THE GLASS MAY BECOME</sup> <del>MARKED</del>
Flames are consistently too large or too small. Carboning occurs.	A - Unit is over-fired or under-fired. <i>rotate 90°</i>	- check pressure readings: Inlet pressure can be checked by turning screw (A) counter clockwise 2 or 3 turns and then placing pressure gauge tubing over the test point. Gauge should read 7" (minimum 4.5") water column for natural gas or 11" minimum water column for propane. Outlet pressure can be checked the same as above using screw (B). Gauge should read 3.5" water column for natural gas or 10" water column for propane. <b>AFTER TAKING PRESSURE READINGS, BE SURE TO TURN SCREWS CLOCKWISE FIRMLY TO RESEAL. DO NOT OVER TORQUE.</b> Adjust pressure regulator screw (C) to required setting.



## 21. ORDERING REPLACEMENT PARTS

Contact your dealer or the factory for questions concerning prices and policies on replacement parts. Normally all parts can be ordered through your Napoleon dealer or distributor. When ordering replacement parts always give the following information:

- |    |                                |    |                     |
|----|--------------------------------|----|---------------------|
| 1. | Model & Serial Number of stove | 3. | Part Number         |
| 2. | Installation date of stove     | 4. | Description of part |
|    |                                | 5. | Finish              |

## 22. REPLACEMENT PARTS LIST

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
G-502	BACK LOG	GA-GS-10.201	BURNER ASSEMBLY - PROPANE
G-501	FRONT LOG	GA-GS10.198	BURNER ASSEMBLY - NATURAL GAS
G-504	RIGHT LOG	WS 725-17	NATURAL GAS VALVE
G-503	LEFT LOG	WS 725-18	PROPANE GAS VALVE
GL-606	LOG SET ASSEMBLY COMPLETE	WS 455-4	#36 DMS NATURAL GAS BURNER ORIFICE
WS-300-15	DOOR GLASS	WS 455-3	#54 DMS PROPANE GAS BURNER ORIFICE
WS-300-14	SIDE WINDOW GLASS	WS 455-13	#37 DMS NATURAL GAS BURNER ORIFICE- HIGH ALT.
GA-GS-225.29	ARCHED DOOR FRAME - BLACK	WS 455-2	#55 DMS PROPANE GAS BURNER ORIFICE- HIGH ALT.
GA-GS-351K	BLACK DOOR c/w GLASS	WS 455-14	NATURAL GAS PILOT ORIFICE
WS-660-7	SPILL SWITCH (NATURAL GAS)	WS 455-15	PROPANE GAS PILOT ORIFICE
WS-660-6	SPILL SWITCH (PROPANE GAS)	WS 357-3	PIEZO IGNITER
GA-GD-361.16	"GLOWING EMBERS"	WS 680-3	THERMOCOUPLE
CL 27 G	CANOPY LOUVRE SET - GOLD PLATED	G-518	NAPOLEON LOGO
GA-GS-330K	BLACK TRIVET		

## 23. ACCESSORIES / OPTIONS

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
111-KT	OUTSIDE AIR KIT	GS 325PB	DOOR FACIA - POLISHED BRASS
GS 62	BLOWER KIT c/w VARIABLE SPEED CONTROL	GS 325 AB	DOOR FACIA - ANTIQUE BRASS
GA-GS-330G	GOLD PLATED TRIVET	GA-GS-005-02	STOVE PIPE ADAPTER - BRASS